COSMIC II
BALANCE
THE STRATEGIC GAME

RapidFire

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COSMIC BALANCE II
THE STRATEGIC GAME

In the year −12 H.E. (2184 A.D.) Raoul DuPont discovered the principles of the Trans-Light Velocity Drive (TLVD). By the year 0 the first successful TLVD ship was launched. What followed was a mass exodus from Terra. But Man was not alone in the galaxy . . .

1.0 INTRODUCTION

COSMIC BALANCE II is a simulation of strategic operations in an interstellar culture. You discover and colonize planets; establish commerce nets; allocate production to supplies, starship construction, and research; and order your starships to various missions.

Be warned: war is costly and economies are fragile.

2.0 GLOSSARY

The following terms are used in the rules. Familiarity with these terms will aid you in understanding the rules.

ACTIVE: The status of a planet which is fully operational.

ATTACK MISSION: Any one of the following missions: Invasion, Commerce Raid, and Planetary Raid.

CARGO CAPACITY: The number of cargo holds a ship contains.

CARGO HOLD: A cargo hold is a space on a ship which can either transport 250 supply points or 1 resource point.

CARGO SHIP: Any ship with a cargo capacity greater than zero.

COLONIAL: The status of a planet which is populated, but which is not operational.

COLONY: A planet of colonial status.

COLONY LEVEL: The number of consecutive turns that a colony needs to be supplied, in order to attain active status.

COMBAT GROUP: A group of ship or ships that have a common mission in a common sector.

COMMERCE: A mission ships can perform which creates resource points from the cargo capacity of ships on that mission.

COMMERCE NET: A group of interdependent planets (7 farm, 2 mine, and 1 indy) that are connected by trade (18 resource points), which are able to produce industrial output points.

COMMERCE RAID: A mission ships can perform which allows the ships to search for and attack enemy ships on commerce or supply missions.

DISCOVERED: The status of a planet which a player knows about, but which has not yet been colonized, or which has been colonized but whose colony failed.

ECOLAPSE: The status of a planet which had been active, but has just lost its active status.

FARM (FARMING WORLD): A planet which is primarily agricultural in nature and which has little or no mineral resources.

GARRISON: 1) A mission ships may perform which allows them to protect the planets in their sector from invasion and planetary raid missions.

2) A group of ships on a garrison mission which have been assigned to a given planet. They are the planet's garrison.

HYPER OUT: The act of turning on a ship's TLVD and leaving the scene of a battle (i.e. bugging out).

INDY (INDUSTRIAL WORLD): A world which has been paved over with factories, with little or no natural resources of its own to support such a state. Industrial worlds are never discovered; they are industrialized at the time of colonization.

INVASION: A mission ships may perform which allows the capture of enemy worlds. For an invasion to be successful the invading ships must defeat the planet's garrison, have at least three points of undamaged cargo capacity remaining, and eight siege gun equivalents in the invading combat group (representing troops).

IO (INDUSTRIAL OUTPUT POINT): An IO is a representation of potential goods and services which may be created. IOs may be used to construct ships, supplies, or be allocated to research efforts.

MINE (MINING WORLD): A planet which has large quantities of mineral resources, yet insufficient food resources to support its population.

MISSION: A mission is a task ships may perform. The following are possible missions: garrison, commerce, supply, patrol, invasion, commerce raid, planetary raid, and scout.

PATROL: A mission ships may perform which is designed to intercept enemy attack missions before they can reach their target.

PLANETARY RAID: A mission ships may perform, the intention of which is to bomb a planet, lowering the planet's status.

RESOURCE POINT: A measure of goods in the form of food, minerals, or manufactured items. Resource Points are needed to operate a commerce net.

SCOUT: A mission ships may perform in an attempt to discover new planets.

SECTOR: An area of space which contains approximately 40 usable planets.

SECTOR SUPPLY POOL: The pool of supply points available in a given sector to the owning player.

SECTOR TRANSPORTED SUPPLY POOL: The pool of supply points that were transported within the given sector and which are available to the owning player for supplying his planets.

SIEGE PHASER EQUIVALENT: A number of ship weapons equal in firepower to one siege phaser. The siege phaser is the standard space weapon for both players.

SUPPLY: A mission ships may perform space which transfers supply points from the Sector Supply Pool to the Sector Transported Supply Pool.

SUPPLY POINT (SUPPLIES): A measure of goods and services produced by one IO. Supplies are used to maintain ships and planets.

TECH LEVEL: A measure of the technological sophistication of the player's people. The player's tech level may be increased by research.

TERR (TERRAN/TERRESTRIAL WORLD): An Earthlike planet with enough food, minerals, and industry to be self sufficient.

TLVD (TRANS-LIGHT VELOCITY DRIVE): The mechanism by which a ship is able to travel faster than the speed of light.

3.0 SETTING UP THE GAME

Insert your game disk into the disk drive of your computer and turn your computer on. The game will automatically begin. If you are using an Atari computer, remove all cartridges before

starting. This display will appear on your screen:

<div align="center">

COSMIC BALANCE II
THE STRATEGIC GAME
</div>

1) NEW GAME   SAVED GAME   CREATE A GAME

2) COSMIC BALANCE I   OFF   ON
    COMBAT   OPTION

3) TWO PLAYER   SOLITAIRE: 1 2 3 4
                  EASY: 1   HARD: 4

    SCENARIOS
4) **TERRAN EXPANSION**
5) **COLONIAL WARS**
6) **FIRST CONTACT**
7) **REBELLION**
8) **THE FINAL CONFLICT**
9) **CREATED SCENARIO**

PRESS 1-9 TO CHANGE SETUP OR THE SPACE BAR TO BEGIN.

NEW, SAVED, OR CREATE A GAME

If NEW GAME is highlighted, you will begin a fresh scenario. If you have a saved game that you wish to return to, press 1 (for Item 1) and SAVED GAME will be highlighted. Later you may wish to create your own scenario. To do this press 1 one more time and CREATE A GAME will be highlighted. By continuing to press 1, the highlighting for Item 1 will continue to rotate through the options.

COSMIC BALANCE I COMBAT OPTION

This option allows the use of Cosmic Balance I to resolve your battles. If the option is ON at the start of each battle, the computer will give you the option of playing the battle out using Cosmic Balance I and inputting the results of your combat into the game.

TWO PLAYER OR SOLITAIRE

If TWO PLAYER is highlighted, the computer will set up a game between two human players. If you wish to play the game against the computer, one of the numbers next to SOLITAIRE: should be highlighted. To change options merely press 3. *(NOTE: You cannot switch to two player mode if the scenario chosen is TERRAN EXPANSION. This is a solitaire scenario only.)*

SCENARIOS

By pressing the number of the desired scenario the computer will set up that scenario. If you have your own scenario (using the CREATE A GAME option) press 9. *(NOTE: You cannot choose the TERRAN EXPANSION scenario if the TWO PLAYER/SOLITAIRE option is set to two player, since this is a solitaire only scenario.)*

4.0 SEQUENCE OUTLINE

This section gives an overview of the flow of the game through its many phases. Details concerning the actual play of the game can be found in later sections. During each turn the players will alternate giving orders to the computer. During odd numbered turns Player 1 will give his orders first; during even numbered turns Player 2 will give his orders first.

4.1 The Production Phase

4.1.1 Ship Supply Segment

The Phasing Player supplies his current ships. Those he does not want to supply he may scuttle. If he does not have enough supplies in his Sector Supply Pool he must either buy sufficient supplies to maintain his ships in that sector or he must scuttle ships until he can maintain the remainder.

4.1.2 Construction Segment

The Phasing Player may spend IOs to construct ships or to perform research. Any unused IOs are automatically spent on supplies and added to the Sector Supply Pool. After all production is completed for all sectors it is determined whether or not any increase in technology was gained from research.

4.2 First Movement Phase

The Phasing Player determines what missions his ships will perform for each sector. Possible missions are garrison, commerce, supply, patrol, invasion, commerce raid, planetary raid, and scout. Ships not ordered to any other mission are placed on garrison duty.

4.3 Execution Phase

During the Execution Phase, the computer will determine which opposing ships have encountered one another and will resolve encounters between opposing ships and between ships and planets. If you have chosen the COSMIC BALANCE I COMBAT OPTION, you may resolve any or all of these battles yourself.

For each sector, players who have ships allocated to missions in that sector will determine whether they want their ships in large or small groups.

4.4 Colony Supply Phase

4.4.1 Discovery Segment

The computer determines what planets the Phasing Player has discovered. *(NOTE: No more than 40 planets may ever exist within a given sector.)*

4.4.2 Colony Supply Segment

The Phasing Player may use supplies transported to the sector by a Supply Mission to colonize discovered worlds or to supply worlds that have not achieved (or have lost) active status. Unsupplied planets which are not part of a commerce net undergo economic collapse and may cease to exist even as colonies.

Transported supplies which are not used in colony supply are added to the sector's Sector Supply Pool.

4.5 Second Movement Phase

The Phasing Player may move any of his ships having a range of 2, or being transported by a ship having a range of 2, into any adjacent sector.

Those ships which end the phase in a sector that does not contain friendly occupied planets are destroyed!

5.0 PLANETS AND PLANET STATUS

There are four classes of planets: Industrial, Mining, Farming, and Terran. Of these, only the Terran planet is self sufficient.

Planets also have four basic status categories: Active, Ecolapse, Colonial, and Discovered.

5.1 Active planets are those which have a high enough population and sufficient equipment to be able to export goods to other worlds. Planets must have an Active status to be a part of a commerce net.

5.2 Ecolapse planets are those which have recently undergone some economic disaster and so are unable to participate in a commerce net or, in the case of a Terran planet, to provide industrial output. Supplying an Ecolapse status planet will return it to Active status.

5.3 Colonial planets are similar to Ecolapse planets but they are further away from Active status and have not necessarily attained Active status. There are ten levels of colonial status. Each level represents the number of turns the planet will have in which to receive supplies before it attains Active status.

5.4 Discovered planets are those planets which have been discovered, but which have never been colonized; or if they have been colonized, the colony has failed. Discovered planets may be colonized by transporting supplies to the planet. *(NOTE: Industrial worlds are never discovered; they are Mining, Farming, or Terran worlds which have been industrialized at the time of colonization.)*

6.0 SHIPS

There are fifteen different classes of ships and a standardized planet. Each has three basic attributes: its size, its range, and its cargo capacity. Each also has a standard set of combat values.

6.1 Attributes

There are five sizes of ships, each approximately twice the mass of the one listed just before it. These are the Corvette, Frigate, Destroyer, Cruiser, and Dreadnought. The larger a ship is, the more it can carry.

The range of a ship is the number of TLVD's it is carrying. This ranges between zero and two. A zero range ship cannot move independently, and may only be assigned a non-garrison mission if a range two ship is transporting it. *(NOTE: A range two ship may only transport one ship at a time.)* A range one ship may move to or from any friendly sector during the First Movement Phase, but may not move during the Second Movement Phase unless it is transported by a range two ship. A range two ship may move in both movement phases (though its missions may o- ʰ ʳbe performed in the First Movement Phase) and may transport one ship during each move   t phase. Thus a range two ship may move to an enemy sector, perform a mission and return to its home sector all in the same turn.

Cargo Capacity is the number of cargo holds a given ship contains. One cargo hold can transport 250 supply points or one resource point. Transported supplies are used to colonize and supply planets, and resource points are used to maintain commerce nets and indirectly to create industrial output.

6.2 Combat Values

Attack strength is the number of siege phaser equivalents that the ship is carrying. The greater the attack strength the more damage it can do.

Defense strength and Armor strength reduce the amount of damage the ship will sustain in combat. The higher the defense strength the more enemy attack strength is required to damage the friendly ship. The lower the armor strength the more damage the ship will sustain from a given barrage.

Speed affects the chance of the enemy scoring a hit on your ship and the speed with which your ship can close on the enemy. The higher the speed, the less chance of receiving damage.

Size determines how much damage the ship can take before being destroyed. The larger the size, the greater the survivability.

6.3 Ship Characteristics Table

SHIP	ID	SIZ	RAN	CARG	ATK	DEF	ARM %	MAX SPD	FULL SHIP NAME
INTR	IN	1	0	00	01	03	0	32	INTERCEPTOR
FRIG	FG	2	0	00	03	02	0	32	FRIGATE
WTCH	WT	3	0	00	05	08	8	24	WATCHER
GRDN	GD	4	0	00	10	22	11	24	GUARDIAN
DFND	DF	5	0	00	14	26	20	24	DEFENDER
DEST	DE	3	1	00	04	04	8	16	DESTROYER ESCORT
ESCT	ES	4	1	00	08	12	8	20	ESCORT
ATTK	AT	5	1	00	12	28	17	24	ATTACK SHIP
LNCR	LN	4	2	00	07	09	6	16	LANCER
RAID	RD	5	2	00	12	19	8	24	RAIDER
TRDR	TD	4	1	05	01	12	0	12	FREE TRADER
MRCH	MR	5	1	07	02	15	6	16	MERCHANT
FRTR	FR	5	1	11	01	25	0	2	FREIGHTER
TRAN	TR	5	2	04	08	34	6	8	TRANSPORT
CLYS	CS	5	2	10	01	25	0	2	COLONY SHIP
PLANET		5	0	00	00	30	50		

7.0 COMMERCE NETS

A Commerce Net is a group of interdependent planets connected by cargo ships. A commerce net consists of 1 Industrial planet, 2 Mining planets, 7 Farming planets, and 18 Resource points. These planets must be in active status at the end of the colony supply phase. The resource points are derived from cargo ships on Commerce Missions.

For each resource point over the minimum 18 resource points per net, the net will produce 250 Industrial Output Points (hereafter called IOs), up to a maximum number of resource points per net dependent on the number of nets:

NUMBER OF NETS	1	2	3	4
MAXIMUM RESRCS	10	9	8	7

Thus the maximum number of resource points you want in a sector with one net is 28 (18 for the net and 10 for IOs); with two nets you want 54 (18 for each of the two nets and 9 for each of the two nets' IOs . . . 18 + 18 + 9 + 9 = 54); and so on.

8.0 THE MAP AND DISPLAYS

8.1 The Map

The action in Cosmic Balance II takes place in the 'small' region of space around our planet. This area is divided into sixteen sectors, each of which contains about 400 stars so that each sector will contain about 40 usable planets. The shapes of the sectors are defined by stretches of empty space or navigational hazards.

Control of the sectors is indicated on the Map by the color of the sector. White sectors are controlled by Player 1, green by Player 2, black by neither player and striped by both. When giving orders you will be asked what sector you are ordering; the sector will turn purple (red on the Atari), indicating that it is the active sector.

8.2 General Display

The General Display is the display that gives you the most complete idea of what is happening within the sector. The upper left hand corner defines the active sector (the sector you are looking at), the Sector's Supply Pool, and any cargo currently being transported within the sector.

The upper right hand corner pictures the active sector. The middle of the display lists all of the ship types and the number of ships of each type available for missions.

The bottom of the display provides a table of the number of each class of planets for each status. This includes the number of all populated enemy planets in the sector.

8.3 Ship Display

The Ship Display is a table of all ships currently in the active sector. Across the top is a list of the types of missions available to ships. These are as follows: Garrison, Commerce, Supply, Patrol, Invasion, Commerce Raid, Planetary Raid, and Scout. Along the left margin is a list of the types of ships. By cross indexing you can tell how many ships of any given class are on any given mission in that sector.

8.4 Planet Display

The Planet Display is a table that details exactly which friendly planets are in the active sector, and what status they are in. Across the top are the planet classes: INDY (Industrial), MINE (Mining), FARM (Farming), and TERR (Terran). Along the left margin are the planet statuses. By cross indexing you can determine how many planets of any given class are of any given status.

9.0 PRODUCTION

During the Production Phase the Phasing Player will receive IOs for each of his sectors which are eligible, and will spend these IOs in maintaining his ships, in building ships, in research and in creating supplies.

9.1 The first thing you do during the production phase is determine which sector you wish to give orders to. (NOTE: Every sector which contains a friendly ship, a Terran planet, or which had ships on a CARGO mission during the previous turn, MUST receive orders before you can proceed to the First Movement Phase). The computer will ask 'WHAT SECTOR (A – P, X TO EXIT)?'. Respond with the letter of the sector you wish to give orders to or whose status you wish to see; this will be the active sector. If you wish to save the game, enter 'S'.

9.2 You will now be asked '(G)ENERAL DISPLAY, (S)HIP DISPLAY, (P)LANET DISPLAY, (O)RDERS, OR E(X)IT?'. If you wish to look at a display for this sector press the first letter of the type of display followed by <CR>. If you wish to give orders to this sector press 'O' followed by <CR>. If you are finished with the sector press 'X' followed by <CR>. Once you have pressed 'O'

you must complete the production orders for that sector; you may not look at any further displays while giving the orders, and you may not change the orders given nor go back and give further orders for production until next turn.

When you are entirely finished ordering and looking at your sectors, press **X**, following by a carriage return (hereafter shown as **<CR>**).

9.3 Ship Supply Segment

Once you have decided to give orders, the General Display will be shown. In addition to what is normally found on the display, you will also find the amount of supplies your colonies will need, the amount of supplies your ships need for maintenance and the amount of IOs available. The amount of IOs is calculated by adding the IOs from your commerce nets in the sector to the IOs derived from your Terran planets in the sector (an active Terran planet will provide 1750 IOs without the need of resource points).

9.3.1 You will now be asked '(S)CUTTLE A SHIP, (B)UY SUPPLIES, OR E(X)IT?'. If you choose to scuttle a ship press 'S' <CR>. If you choose to buy supplies, press 'B' <CR>. If you have at least as many supplies in your Sector Supply Pool as you need to supply your ships you may press 'X' <CR> and move to the Construction Segment.

9.3.2 When you decide to scuttle a ship, the computer will ask **'WHAT SHIP CLASS?'**. Type in the ID of the ship class that you wish to scuttle (see 6.3). The computer will now ask **'HOW MANY?'**. Type in the number of that ship class you want scuttled. If you have that many, the computer will scuttle them.

9.3.3 A scuttled ship is destroyed and therefore does not need maintenance. In addition you can salvage part of the ship . . . one eighth of the ship's original cost is returned in the form of supplies.

9.3.4 If you buy supplies, the computer will ask **'BUY HOW MANY SUPPLIES (0-nnnn)'**, where nnnn is the maximum number of supplies that may be bought.

Each supply point costs one IO and each point bought increases the Sector Supply Pool by one.

9.4 Construction Segment

When you enter the Construction Segment, the computer again shows the General Display. This time only your remaining IOs are displayed, aside from what is normal for the General Display. This is the amount of IOs you have available for ship construction, research, and manufacturing supplies.

9.4.1 You will now be asked 'BUY A (S)HIP, (R)ESEARCH, OR E(X)IT?'. If you wish to construct a ship, press 'S' <CR>. If you wish to perform research, press 'R' <CR>. If you are finished spending, press 'X' <CR> and all your remaining IOs will be converted to supplies which will be added to the Sector Supply Pool.

9.4.2 If you decide to construct a ship the computer will ask **'WHAT SHIP CLASS?'**. Respond with the ship's ID (see 6.3). The computer will then ask **'HOW MANY?'**. Type in the number of ships of that class you want (if you have enough IOs to buy them) and the computer will add those ships to your fleet.

9.4.3 SHIP COST AND MAINTENANCE TABLE

SHIP TYPE	BUILD COST	MAINT COST	SCUTTLE BONUS	SHIP TYPE	BUILD COST	MAINT COST	SCUTTLE BONUS
INTR	50	5	6	LNCR	1500	50	187
FRIG	300	15	37	RAID	4000	110	500
WTCH	650	30	81	TRDR	800	35	100
GRDN	1500	50	187	MRCH	1600	55	200
DFND	4000	90	500	FRTR	1600	40	200
DEST	650	30	81	TRAN	3000	90	375
ESCT	1500	45	187	CLYS	1600	50	200
ATTK	4000	100	500				

9.4.4 If you decide to perform research, the computer will ask **'SPEND HOW MUCH ON RESEARCH (0-nnnn)'**, where nnnn is the maximum amount that may be spent in that sector. At the end of the Production Phase it is determined whether or not your research has paid off. This is done by totaling the amount of IOs spent on research in all your sectors. For every 400 IOs spent there is

approximately a one percent chance of your Tech Level going up. The higher your tech level, the more formidable your ship in combat. Tech Level 6 is the maximum that can be attained during this game.

9.4.5 When you exit the Construction Segment, you return to the map and may give production orders to the next sector.

10.0 FIRST MOVEMENT PHASE

During the First Movement Phase you will be able to assign your ships to missions in the same or adjacent sectors. Only ships that are currently on garrison may be moved, so once assigned to a mission, the ship is committed for that turn. All ships start the turn in garrison.

At the end of the First Movement Phase, the computer will automatically check each sector to see if there is enough cargo being moved within the sector to support all the sector's commerce nets. If there is not, the computer will go ship class by ship class through the cargo ships, moving as many ships as are necessary to commerce missions, until enough resource points are being moved to provide the sector with full production.

10.1 When you enter the Frist Movement Phase, the computer will display the map and ask you 'IN WHAT SECTOR (A–P, X TO EXIT)?'. Respond with the sector from which you want to give orders. *(Example: If you are going to order a DE to scout sector B from sector A, you would respond 'A' <CR>.* If you press 'X' <CR> the First Movement Phase will end. Unlike the other orders phases, you may return to any sector to order uncommitted ships until you exit the First Movement Phase.

10.2 The computer will now ask '(G)ENERAL DISPLAY, (S)HIP DISPLAY, (P)LANET DISPLAY, (O)RDERS, OR E(X)IT?'. If you wish to look at a display press the appropriate letter. If you are finished with this sector press 'X' <CR>. If you wish to give orders to the uncommitted ships in this sector press 'O' <CR>.

10.3 Missions

The computer will now ask 'MISSION (CM, SU, PT, IN, CR, PR, SC, X)?'. Respond with the two-letter code of the mission onto which you wish to order your ships. If you do not wish to assign any other ships from this sector at this time, then press 'X' <CR>.

10.3.1 CM

Ordering a commerce mission causes all cargo ships assigned to move cargo within the target sector (see 10.4). Noncargo ships will serve as escorts for the cargo ships. For every point of cargo capacity of ships assigned to a commerce mission, the target sector will receive one resource point. Commerce missions are necessary to maintain commerce nets and to provide resource points for the creation of IOs.

10.3.2 SU

Ordering a supply mission causes cargo ships to transport supplies from the active sector (the sector the ship is from) to the target sector (the sector the ship is moving to). Noncargo ships assigned to a supply mission escort the cargo ships. *(NOTE: No more than three escorts for each cargo ship may ever be assigned to a commerce, supply or invasion mission).*

The cargo ship will draw 250 supplies from the active sector's Sector Supply Pool for each of the ship's cargo capacity points. These supplies will be transferred to the target sector's Sector Transported Supply Pool. If the cargo ship can transport more supplies than are currently in the active sector's Sector Supply Pool, it will take all the remaining points in the Sector Supply Pool.

Only transported supplies can be used to colonize and supply planets during the Colony Supply Phase.

10.3.3 PA

Ships assigned patrol missions are searching through friendly space for enemy raiders. During the Execution Phase, each time the enemy sends ships into friendly space there is a chance that friendly patrols may intercept the enemy. The more ships on patrol, the greater the chance of interception. If an interception occurs, a battle between the enemy and friendly ships ensues. Whatever the result, the enemy mission is aborted and the friendly patrol heads home.

10.3.4 IN

An invasion consists of one or more cargo ships attacking an enemy planet. Cargo ships assigned to invasion use their cargo capacity to transport troops to the enemy planet. Noncargo ships serve as escorts for the cargo ships. A battle ensues with any enemy ships on garrison around

that planet. If at the end of combat the invaders hold the system and have at least three surviving cargo capacity of troops, and eight siege gun equivalents, the planet is captured.

10.3.5 CR

A commerce raid consists of one or more ships searching for enemy commerce or supply missions in the target sector. There is a fifty percent chance of a raid finding a target if one is available. During the short time before the enemy cargo ships can hyper out, the commerce raider attempts to overhaul and destroy the enemy.

A successful raid against a commerce mission will result in the loss of enemy resource points and the reduction of enemy production, or even the economic collapse of an enemy commerce net. A successful raid against a supply mission will result in the loss of enemy transported supply and thus the ability to colonize new planets or maintain the colonies they have.

10.3.6 PR

A planetary raid consists of one or more ships attacking an enemy planet in the hopes of destroying enough resources and population to bring the planet to economic ruin. During the brief attack, the raider will attack any enemy garrison and bombard the planet. The raid is successful if one half of the planet's resources are destroyed. *(NOTE: Using Cosmic Balance I to resolve the attack, the raid is successful if one-half of the planet's critical hits are destroyed.)*

10.3.7 SC

Ships on a scout mission search the target sector for any new planets. Only ships with a range of one or two may perform scout missions. Each scout ship searches independently and scouts may not be intercepted by patrols.

10.3.8 Garrison

Noncargo ships not otherwise assigned are automatically assigned to garrison duty. Cargo ships on garrison are actually considered to be hiding in some safe place . . . cargo ships do not defend planets. At the beginning of the Execution Phase, the computer assigns all noncargo ships on garrison missions to friendly planets. The assignments are based on the value of the planet and the ability of the ship to defend it. The more valuable the planet, the more and/or the better the ships defending it.

Naval Intelligence will usually be able to determine when an invasion is imminent. There is a one half chance that any given noncargo ship on garrison which has a range of one or two will reinforce the attacked planet before the enemy invasion does. *(NOTE: No more than four ships will ever garrison a single planet).*

10.4 Once you have chosen your mission, the computer will ask 'MOVE TO WHAT SECTOR (A–P, X TO EXIT)?'. Respond with the letter of the sector you wish as the target sector. The target sector is the sector in which you want to carry out the mission. This could be the same as the active sector (in fact it usually will be), or it can be any adjacent sector. Look at the map provided with the game. If the active sector has a common border with the desired target sector, they are adjacent. Touching corners do not count as common borders.

If you have finished assigning all the ships from the active sector for this mission, press 'X' <CR>.

10.5 Moving the Ships

When you have chosen the target sector, the computer will display the ACTIVE sector's Ship Display. In addition the following will be shown: the resource points needed to create all your possible commerce nets, the amount of resource points already moved within this sector, the supply needed to maintain those planets that are not part of a possible commerce net, the supply already placed in the ACTIVE sector's Sector Transported Supply Pool, the Sector Supply Pool, and the statement: sector 'X' to sector 'Y' where X represents the sector from which you are moving ships and Y represents the sector you are moving to.

10.5.1 The computer will now ask 'WHAT SHIP CLASS (X TO EXIT)?'. Respond with the ID of the ship class you wish to assign this mission.

Ships with range zero may never be assigned to scout missions. In order for a range zero ship to be assigned to a non-scout mission, there must already be at least as many range two ships already assigned as range zero ships. Furthermore, those ships must have been assigned at the same time as the range zero ships . . . before 'X' has been typed.

Example: You have chosen to perform an escorted supply mission from sector A to sector B. When you are asked 'WHAT SHIP CLASS?' you respond 'CS' for colony ship. You tell the computer you want two of them (see 10.5.2). The computer now returns to the question 'WHAT SHIP CLASS?'. At this point you can assign up to two range zero ships to the supply mission.

However, if you answered 'X', the colony ships you just ordered would be assumed to be leaving at that moment and you could no longer send a range zero escort. Only if you had answered 'WT' (for example) before you answered 'X' could the watchers have gone too. If you type 'WT' first, only two watchers could go, since only two colony ships had been assigned.

10.5.2 When you have chosen the ship class you wish to assign to the mission, the computer will ask 'HOW MANY?'. Respond with the number of ships of the class just chosen that you wish on this mission. No more ships of a given class may be assigned than you have on garrison in the active sector. The designated ships are removed from garrison and placed on the desired mission slot in the target sector. The Ship Display will reprint showing the new status of ships in the active sector.

11.0 EXECUTION

During the Execution Phase the computer will perform the missions previously assigned sector by sector in a random order.

11.1 When the computer has determined which sector it is going to deal with first, it will determine if there are any attack missions being performed within the sector. If there are none, it will proceed to another sector. An attack mission is one of the following missions: invasion, commerce raid, and planetary raid.

11.2 If there are attack missions, the computer will assign all noncargo ships on garrison duty to a planet. The more valuable the planet, the better and/or the more ships will be assigned to it. *NOTE: There may never be more than four ships assigned to a planet.*

11.3 Combat Groups

If there are any combat groups in the sector, the computer will now ask 'PLAYER n, DO YOU WANT (L)ARGE OR (S)MALL COMBAT GROUPS?' where n is the player number.

11.3.1 A combat group is a group of one to four ships with a common mission in the same sector. Ships of range two will always be assigned to the same combat group as range zero ships. There must be at least one cargo ship per combat group that is on a commerce, supply, or invasion mission. Thus the maximum number of invasions in a given sector may never exceed the number of cargo ships with an invasion mission. Since ships on scout missions do not participate in the Execution Phase, they are not assigned to combat groups.

11.3.2 If you choose large combat groups, the number of ships in each combat group will tend toward four; thus there would be fewer actual combat groups. If you choose small combat groups the number of ships in each group will tend toward two; thus there would be more actual combat groups.

11.4 Combat

The computer will now randomly select one combat group that is on any attack mission.

11.4.1 There is one chance in sixteen for each opposing combat group on patrol that a patrol will intercept the attacking combat group. If this happens, the opposing combat groups will fight each other and any survivors will head home.

11.4.2 If the attacking group is not intercepted, it will attempt to find a target for its mission.

11.4.2.1 If the attacking combat group is on a commerce raid mission, there is an even chance that it will find an enemy combat group on supply or commerce missions (assuming there are any to find). A short battle will result with the cargo ships trying to escape. At the end of the battle, any survivors of the attacking combat group will head home; and any survivors of the defenders will continue their mission, carrying the remains of their cargo. The defenders will not become a target again that turn.

11.4.2.2 Normally the choice of target of a planetary raid or invasion is random. The following rule allows you to make sure you can attack one planet of your choice with a planetary raid or invasion. If the attacking mission is a planetary raid or invasion and this is the attacking player's first planetary raid or invasion in the sector, the computer will ask 'PLAYER n, FOR YOUR PRIMARY TARGET WHAT TYPE OF PLANET: (I)NDY, (M)INE, (F)ARM, (T)ERR?', where n is the player number. If the enemy owns a planet of the type you designate, the attack will be on a planet of that type. *NOTE: This applies only to one target planet per person. Since the order in which missions are executed is random, if you order both invasions and planetary raids in the same sector, the planet you intended for a planetary raid could be invaded instead. Further this would mean you couldn't control the target the planetary raid was hitting.*

11.4.2.3 If the attacking mission is a planetary raid, a brief battle will ensue between the attacking combat group and the target planet and the target planet's garrison. Against a planetary raid, the garrison will never be more than three ships. At the end of the battle, the surviving attacking ships will head home. The surviving garrison ships will remain on garrison and defend the planet against any further attacks.

11.4.2.4 If the attacking combat group is on an invasion mission, a battle will ensue between the attacking combat group and the target planet's garrison and any reinforcements. (There is one chance in two that any noncargo ship with a range of one or two, on garrison within the sector, will reinforce the target planet. Reinforcements will never bring the total of the garrison above four ships). At the end of the fight the attacking combat group's survivors will head home. If the garrison fought off the invasion, the survivors will remain to defend against any further attacks that might be made. If the planet was lost, any surviving garrison ships (a rarity) will head home (i.e. join all the other ships that have completed their missions and are no longer able to participate in combat).

11.4.2.5 *NOTE: In any battle, ships may try to hyper out when losing. In the planetary raid, the attacker will always hyper out. In a commerce raid, surviving defenders will always hyper out. Range zero and range one ships in an enemy sector are destroyed if they attempt to hyper out without a range two ship to tow them.*

11.4.3 After deciding the combatants, but before the start of the fight, the computer will tell you which player is attacking, what the mission is and the opposing ships. If you chose the Cosmic Balance I combat option at the start of the game, the computer will ask '**DO YOU WISH TO FIGHT THIS BATTLE USING COSMIC BALANCE I (Y OR N)?**'. If you choose to fight the battle using Cosmic Balance I type '**Y**', and follow the procedures outlined in section 15.0.

11.4.4 If you did not fight the battle using Cosmic Balance I, the computer will show the results of the combat. The computer will print a list of the ships involved in the battle and their status. If a ship is a cargo ship on a commerce, supply, or invasion mission and any cargo holds were destroyed, the computer will tell how many were destroyed. Otherwise the computer will print **DESTROYED** if the ship was destroyed and **SPACE WORTHY** if the ship was not destroyed. Finally, if the attack mission was an invasion or a planetary bombardment the computer will tell you if the mission was successful. If the mission was an invasion mission, the computer will print either '**THE PLANET FOUGHT OFF THE INVASION!**' or '**THE PLANET HAS JUST BEEN CAPTURED!**', depending on whether the mission was unsuccessful or successful. If the attack combat group's mission was a planetary raid, the computer will print either '**PLANET SURVIVES BOMBARDMENT**' or '**THE PLANET UNDERGOES A HEAVY BOMBARDMENT**', depending on whether the mission was unsuccessful or successful.

11.5 When all combats within a sector have been resolved, the computer chooses another sector. When all sectors have been processed, the Execution Phase is finished.

12.0 COLONY SUPPLY PHASE

During the Colony Supply Phase, first one player then the other searches for new planets, supplies his planets, and starts new colonies.

12.1 Discovery

For each ship of range one or two that was on a scout mission in a given sector, there is a chance that the scout will discover a new planet. The more planets that have been discovered, the less the chance of finding a new planet. Once 40 planets have been discovered, it is impossible to find any more; however, it IS possible for both players to discover the same planet. In this case the first player who settles the planet will get it, while the other player will lose the planet from his list of discovered planets.

There is approximately a 22% chance of finding a mining planet, a 77% chance of finding a farming planet and a 1% chance of finding a terran planet. Industrial planets are not found . . . they are converted from whatever they were to industrial at the time of colonization.

12.2 Colony Supply

During the Colony Supply Segment, the Phasing Player must give orders to each sector in which he has populated planets. He will then have the opportunity to colonize discovered planets and supply populated planets which are not part of a commerce net and which are not active terran planets. Those planets which need supplies and do not receive them suffer economically and can cease to exist, even as colonies.

12.2.1 The first thing that happens during the Colony Supply Segment will be the display of the map and the computer will ask '**SUPPLY WHAT SECTOR (A-P, X TO EXIT)?**'. If you have given orders to all sectors containing friendly populated planets, type '**X**'. If not, then type the sector to which you wish to give orders.

12.2.2 The computer will now ask '**(G)ENERAL DISPLAY, (S)HIP DISPLAY, (P)LANET DISPLAY, (O)RDERS, OR E(X)IT?**'. If you wish to look at a display, type in the appropriate letter. If you have finished giving orders to this sector, type '**X**'. If you wish to give orders, type '**O**'.

12.2.3 The computer will now print a modified Planet Display of the active sector which will show all the planets which are NOT part of a commerce net and which are not active terran planets. It will also show the amount of supplies in the Sector Transported Supply Pool.

12.2.4 The computer will print at the bottom of the screen '**(S)UPPLY A PLANET, START A (C)OLONY OR E(X)IT?**'. If you don't have any supplies or you don't wish to supply or colonize a planet, then press '**X**'; and all supplies will be transferred from the Sector Transported Supply Pool to the Sector Supply Pool. *NOTE: Once you have exited, you may not return to supply or colonize a planet.*

12.2.5 If you decide to colonize a planet, the computer will ask '**COLONIZE A (T)ERRESTRIAL, (M)INERAL, OR (F)ARMING PLANET?**'. Type in the type of planet you want to colonize (assuming you have discovered that type). Now the computer will ask '**INDUSTRIALIZE IT (Y OR N)?**'. If you wish to convert the planet to an industrial planet, type '**Y**'. If you have enough supplies in the Sector Transported Supply Pool, the computer will deduct the cost of the planet (see 12.2.7) and attempt to colonize the planet. There is approximately an 87% chance to successfully colonize a planet. If the attempt fails, you can make another attempt as long as you have sufficient supplies in the Sector Transported Supply Pool. Each attempt to colonize a planet costs supplies whether or not the attempt is successful. If the attempt is successful, the planet will disappear from the modified Planet Display. Different types of planets require different amounts of time to bring to active status (see 12.2.7).

12.2.6 If you decide to supply a planet, the computer will ask '**SUPPLY WHAT STATUS PLANET: (A)CTIVE, (E)COLAPSE OR COLONIAL (1-9, 0)?**'. Type in the letter of the status of the planet you wish to supply. If you wish to supply a colony status world, type in the colonial level (the number next to colony on the line the planet appears). Zero is used instead of ten for colonial level 10. The computer will ask '**WHAT TYPE OF PLANET: (I)NDY, (M)INE, (F)ARM, (T)ERR?**'. Type the letter of the type of planet. Finally the computer will ask '**HOW MANY?**'. Type in the number of planets of that type and status that you wish to supply. If those planets exist and if you have enough supplies in the Sector Transported Supply Pool (see 12.2.7), the computer will deduct the required supplies from the Sector Transported Supply Pool, will remove the planet(s) from the modified Planet Display, and will move the planet up one colonial level or status. *Example: you have supplied a Colony 3 mining planet, a Colony 1 farming planet, an Ecolapse terran planet, and an Active industrial planet. The mining planet would become Colony Level 2; both the farming planet and the terran planet would become active; and the industrial world would stay active (since there is no further status it could gain).*

If a planet is supplied and so gains active status and its new status would allow it to complete a commerce net (remember you need 18 resource points too), then all remaining planets of active status that would comprise that net would no longer need to be supplied and would also disappear from the modified Planet Display. This allows the player to rebuild a planet which has just been the target of a planetary raid and still be able to use the commerce net of which it was a part without having to resupply every planet in the net.

At the end of the Colony Supply Segment, any planet which needed supply and did not receive it (i.e. was listed on the modified Planet Display when the player typed '**X**') will suffer economically. Planets of active status will fall into ecolapse, planets in ecolapse will be reduced to Colony Level 2, colonial status planets will be reduced two levels; and colony status planets of Colony Level 9 or 10 will cease to exist as colonies (will be placed in Discovered status).

12.2.7 Planet Cost and Colonization Time Chart

PLANET TYPE	COST	COL. TIME	PLANET TYPE	COST	COL. TIME
INDUSTRIAL	700	8 TURNS	FARMING	100	2 TURNS
MINING	200	5 TURNS	TERRAN	450	4 TURNS

13.0 SECOND MOVEMENT

During the Second Movement Phase you will be able to move any of your ships which have a range of two, or which are transported by a ship of range two, to an adjacent sector. Any ships

which end the Second Movement Phase in a sector which does not have at least one friendly occupied planet are destroyed.

13.1 When you enter the Second Movement Phase the computer will display the map and ask you 'WHAT SECTOR (A-P, X TO EXIT)?'. Respond with the sector from which you wish to move ships. If you have no further ships you want to move, type 'X'.

13.2 The computer will now ask '(G)ENERAL DISPLAY, (S)HIP DISPLAY, (P)LANET DISPLAY, (O)RDERS, OR E(X)IT?'. If you are finished ordering the ships in this sector type 'X'. If you wish to look at a display, type the first letter of the display type. If you wish to give orders type 'O'.

13.3 If you decide to give orders the computer will ask 'MOVE TO WHAT SECTOR (A-P, X TO EXIT)?'. If you have finished ordering the ships in this sector type 'X'. If not, type letter of an ADJACENT sector that you wish to move to.

13.4 The computer will now print the Ship Display of the active sector and ask 'WHAT SHIP CLASS (X TO EXIT)?'. Respond with the ID of the ship class you wish to move. A ship with a range of zero or one may not be moved during this phase unless it is being transported by a range two ship. As in the First Movement Phase, there must already be a range two ship moving to the target sector before the ships with less range may be assigned. Remember, only one ship of range two may transport a ship of less than range two, and exiting sends off all ships immediately. All ships moved are assigned a temporary patrol mission in the target sector.

13.5 When you have chosen the ship class you wish to move, the computer will ask 'HOW MANY?'. Respond with the number of ships of the class just chosen that you wish to move from the active sector to the target sector. No more ships of a given class may be moved than you have available on garrison in the active sector. The designated ships are removed from garrison and placed on the patrol slot of the target sector. The Ship Display will reprint, showing the new status of ships in the active sector.

13.6 When you have finished the Second Movement Phase the computer will check each sector and determine if you have an occupied planet in that sector. If you do not, all your ships and supplies in that sector are destroyed.

14.0 SAVING THE GAME

During the course of the game you will probably need to save the game. If you decide to fight a battle using Cosmic Balance I, if you create your own scenario, or if just decide to save a game in progress, you will need to save the game.

In order to save a game in progress you must type 'S' during the Production Phase, when the computer asks you 'WHAT SECTOR . . .'.

14.1 When you come to an opportunity to save a game you will be asked to insert your SSI Save Game Disk into the drive. If you do not have an SSI Save Game Disk, insert an old or blank disk into the drive. Press any key to continue.

14.2 The following menu will now appear:

SSI SAVE ROUTINES

(I)NITIALIZE AN SSI SAVE GAME DISK
(S)AVE A GAME ON AN SSI SAVE GAME DISK
(C)ATALOG AN SSI SAVE GAME DISK
(D)ELETE A GAME FROM AN SSI SAVE GAME DISK
(E)ND GAME
(R)ETURN TO GAME

Press the letter of your selection. **NO <CR> IS REQUIRED.**

14.3 (I)nitialize

If you have not previously created an SSI Save Game Disk press 'I'. The computer will tell you to make sure a useless disk is in the drive. When you have done this, press any key and the computer will initialize the disk. Immediately after initializing do a catalog of your new SSI Save Game Disk to insure that the disk was properly initialized. The catalog should look like this:

	LEN	–<NAME>–	LENGTH	BLK
B	026	>–SSI GAME SAVE DISK–<	6656	000

If it does not look like this make another attempt to initialize the disk.

14.4 (S)ave

Now that you have an SSI Save Game Disk, you should save the game in progress or the scenario you have just created. To do this press 'S'. The computer will ask **'WHAT IS THE NAME UNDER WHICH THE GAME IS TO BE SAVED?'**. Respond with a name of not more than ten letters. The name must begin with **'SCEN'** and the entire name must not be SCEN0, SCEN1, SCEN2, SCEN3, or SCEN4. Nor may the name be one that already appears on your SSI Save Game Disk. If you wish to reuse a name, you must delete the item from your disk. When you have typed the name of the game you wish to save, the computer will save that game out onto the disk. When it has finished, it is a good idea to catalog the disk to make sure the game was saved . . . sometimes you will have run out of disk space without realizing it and so the game is not saved.

14.5 (C)atalog

When you wish to look at your SSI Save Game Disk to see if everything has been done properly or because you forgot the name of a previous game that you may wish to reuse, simply type 'C'. The computer will catalog the disk.

14.6 (D)elete

When you wish to reuse a game name, or the SSI Save Game Disk is getting full, you may wish to delete a game from the disk. To do so simply press 'D'. The computer will ask **'WHAT IS THE NAME OF THE GAME TO DELETE?'**. Type in the name of the game you wish to delete and the computer will do so. If the name you wish to delete is not on the disk or is an illegal name, the computer will instead catalog the disk.

14.7 (E)nd

If you are saving the game in progress and do not wish to continue playing immediately, or you are creating a scenario and don't wish to play the scenario immediately, or you are saving a battle and wish to proceed to Cosmic Balance I, you must press 'E' after saving the game.

In the first two cases the game will simply end. In the latter case the computer will tell you to **'INSERT YOUR COSMIC BALANCE I DISK THEN PRESS ANY KEY TO CONTINUE'**. Do so and the computer will automatically boot the Cosmic Balance I disk.

14.8 (R)eturn

This option is used after saving a game or scenario if you want to immediately resume the game. The option is not allowed when you are saving a battle . . . you must proceed to Cosmic Balance I. When you press 'R', the computer will tell you to **'REINSERT YOUR GAME DISK, THEN PRESS ANY KEY TO CONTINUE'**. Do this and you will resume the game where you left off or start the scenario you have just created.

15.0 THE COSMIC BALANCE COMBAT OPTION

If you choose the option at the start of the game, or at the time of any resumption of the game, you will have the opportunity to fight each battle using Cosmic Balance I. During the Execution Phase the computer will tell you the mission and the opposing forces. At the point it will ask you **'DO YOU WISH TO FIGHT THIS BATTLE USING COSMIC BALANCE I (Y OR N)?'**. If the battle looks interesting, type 'Y'; if not, type 'N'.

15.1 If you do wish to fight, the computer will enter the Save Game Routines. After saving the game (and initializing the disk if necessary) press 'E'. The computer will tell you to **'INSERT YOUR COSMIC BALANCE I DISK THEN PRESS ANY KEY TO CONTINUE.'**. Do as it says and the computer will go directly to Cosmic Balance I. The scenario you choose in Cosmic Balance I should match the mission. Likewise the ships you design should match the ships that were engaged (i.e. the size, cargo capacity, and range should be those given in the Ship Characteristics Table . . . section 6.3. *NOTE: All ships with range two must have a tractor)*.

15.2 When the battle is finished, make sure you note how many cargo holds were detroyed; and if you are performing a planetary raid, note how many critical hits the planet had left. Now reboot the Cosmic Balance II disk and choose the Saved Game Option. Also make sure the other options are set correctly. When you have chosen the option, the computer will ask you to insert your SSI Save Game Disk and type the name of the game you wish to resume. Type the name of the battle that was saved, or if you don't remember it **'CAT'**. If you type **'CAT'** the computer will catalog your SSI Save Game Disk. When you have typed in the name of the game you wish to resume, the computer will recall the game and tell you to reinsert your game disk. Press any key to continue.

15.3 The computer will now display the attacking and defending ships as they were at the start of combat. One of the ships will be highlighted. This is the active ship. Toward the bottom of the screen the computer will ask '(S)HIP, (P)LAYER, (C)APTURE, (E)LIMINATE, OR E(X)IT?'. Press the letter of the option you wish to choose.

15.3.1 (S)hip
This will change the active ship to the player's next ship on the display. If the active ship was the last ship on the display, the active ship will become the first ship.

15.3.2 (P)layer
This will change the active ship to one of the other player's ships. If the other player has no ships, then the command is ignored.

15.3.3 (C)apture
The active ship is considered captured by the opposing player. The captured ship will be removed from the display and to the original owning player it is considered destroyed. All cargo holds are assumed lost. If the capturing player has a lower technology than the opposing player, there is a one-third chance that the capturing player's technology will increase to equal the opposing players. The capturing player will gain possession of the captured ship, but it will not appear on the display.

15.3.4 (E)liminate
The active ship is considered destroyed, all cargo holds are lost, and the ship is removed from the display.

15.3.5 E(x)it
When all combat results have been entered the player should press 'X'. The computer will then ask 'ARE THESE RESULTS CORRECT (Y OR N)?'. If any of the results you entered are incorrect, press 'N'; it will reset the display and you can start again.

15.4 If the results were correct, press 'Y'; the computer will ask you a last question concerning the success of the mission.

15.4.1 If the attack mission was an invasion the computer will ask 'DID YOU CAPTURE THE PLANET (Y OR N)?'. If the attackers had three surviving cargo holds, eight siege gun equivalents, and held the territory, press 'Y'. If not, press 'N'.

15.4.2 If the attack mission was a planetary raid, the computer will ask 'DID YOU SUCCESSFULLY BOMB THE PLANET (Y OR N)?'. If the planet had eight or less critical hits at the end of the planetary raid, press 'Y'. If not press 'N'.

15.4.3 If the attack mission was a commerce raid, the computer will ask you 'HOW MUCH CARGO DID THE DEFENDER LOSE FROM HIS SURVIVING SHIPS?'. Type in the number of cargo holds that were lost from the cargo ships that were not eliminated or captured.

15.4.4 If the attack mission was intercepted by a patrol, no question will be asked.

15.4.5 When all the remaining questions have been asked, the computer will return to the game and start with the next battle (if any).

15.5 It is highly recommended that players using the Cosmic Balance I option design all their Cosmic Balance I ships at the start of the game and determine which ships are being assigned which missions. Not only will this add more flavor to the game, but it will also make it realistic by having ships not be ideally designed for the circumstances (such as transporter ships used against unescorted free traders).

16.0 CREATING A SCENARIO

If you wish to create a scenario, you will assign the number of planets to each sector and the status and type of each. If any of the planets are colonies, assign the Colony Level. Determine the planets each player has discovered and the planets both have discovered. Assign the ships in each sector, the supplies in the Sector Supply Pool, and the amount of resource points moved in the sector during the hypothetical previous turn.

16.1 To create your own scenario you must, at the start of the game, set the NEW / SAVED / CREATE GAME Option to Create a Game. The computer will now enter the Create a Game section.

16.2 The computer will have player one set up, and then player two. The first thing that will happen is the computer will say 'PLAYER n'S SETUP'. This will be followed by the question 'WHAT IS YOUR TECH?'. Respond with a number between one and six which will be the player's technological level.

16.3 Now the computer will ask 'WHAT SECTOR (A-P, X TO EXIT)?'. Type in the letter of the first sector you wish to set up.

16.4 Next the computer will ask '(S)HIPS, (P)LANETS, OR E(X)IT?'. If you wish to assign the current player's ships in this sector, type 'S'. If you wish to assign the player's planets, type 'P'. If you are finished with this sector, type 'X'.

16.5 If you chose to assign ships, the computer will now ask 'WHAT SHIP CLASS: 0 = NONE, 1 = INTR, 2 = FRIG, 3 = WTCH, 4 = GRDN, 5 = DFND, 6 = DEST, 7 = ESCT, 8 = ATTK, 9 = LNCR, 10 = RAID, 11 = TRDR, 12 = MRCH, 13 = FRTR, 14 = TRAN, 15 = CLYS?'. Type the number of the ship class you wish to add to the sector. If you are finished adding ships to the sector, type '0'. If you choose a class, the computer will ask 'HOW MANY?'. Type in the number of ships of that class you want in the sector.

16.6 If you decide to assign planets, the computer will ask 'PLANET STATUS: 0 = NONE, 1 = ACTIVE, 2 = ECOLAPSE, 3 = COLONY, 4 = DISCOVERED, 5 = SHARED?'. Respond with the number of the status you want to assign. If you have finished assigning planets to this sector, type '0'. If you wish to assign planets which have been discovered by just the current player, type '4'. If you wish to assign planets which have been discovered by both players, type '5'. DO NOT ASSIGN THE SAME PLANET TO BOTH DISCOVERED AND SHARED UNLESS YOU WISH TWICE THE NUMBER OF DISCOVERED PLANETS TO APPEAR. DO NOT ASSIGN THE SAME PLANETS TO SHARED FOR THE SECOND PLAYER THAT YOU ASSIGNED TO THE FIRST PLAYER UNLESS YOU WANT THE PLANETS DUPLICATED.

Now the computer will ask 'WHAT PLANET TYPE: 0 = FINISHED, 1 = INDUS, 2 = MINE, 3 = FARM, 4 = TERR?'. Respond with the number of the planet type that you want. If you have finished assigning planets of the current status, type '0'.

Now the computer will ask 'HOW MANY?'. Respond with the number of planets of that status and type you want. The number entered must be between zero and forty. REMEMBER WHEN ASSIGNING PLANETS TO A SECTOR, DO NOT EXCEED A TOTAL OF FORTY PLANETS. Both players' planets must be added to get the total.

If you are assigning colony status planets, the computer will ask 'WHAT IS THE PLANETS' COLONY LEVEL?'. Respond with the Colony Level. This must be between one and ten.

16.7 When you have finished assignments to this sector, the computer will ask 'HOW MANY SUPPLIES?'. Type in the number of supplies in the player's Sector Supply Pool.

16.8 Next the computer will ask 'HOW MUCH CARGO?'. Respond with the number of resource points the player theoretically moved last turn. If no recource points were moved the 'previous' turn, no commerce nets exist and so only Active Terran planets could produce IOs.

16.9 When both players' setups are finished, the computer will move to the SSI Save Routines (see 14.0). Save the scenario on your SSI Save Game Disk and start the game by typing 'R'.

17.0 THE SCENARIOS

The game provides five scenarios tracing the history of the human race's expansion through the stars. Each scenario is on a somewhat larger scale than the previous one, and so each will be harder to play than the previous one. The first scenario is a one player only scenario. It has no conflict and its sole purpose is to let you become familiar with the movement and economic rules.

The computer will not end the game when victory conditions have been met or when the duration has expired. The computer WILL end the game when it has lost all production capacity.

17.1 Terran Expansion (4-60 H.E.)

When the first TLVD drive was launched in 0 H.E., the government of Terra saw a method of getting rid of some of the excess population (and more importantly the troublemakers) that were disturbing the planet. In the year 4 H.E., the first scout ship was sent looking for habitable planets. This was followed by an Exodus as Terra shipped thousands of colonists off to new worlds. It was quickly found that the new colonies could not be self sufficient and an enormous amount of capital had to be invested to make the colonies a going concern. As the Terran Government spent more and more on establishing the colonies, Terra's population became increasingly angry at the 'waste' of resources that they felt should have been spent on them. While the colonial effort was successful, historians agree that if it had required even four more years, the people of Terra would have revolted.

Player 1: Terra Tech Level-1

Player 2: There is no Player 2

Game Length: 15 turns or until victory is achieved.

Victory conditions: Player 1 must established a commerce net by turn 15.

17.2 Colonial Wars (112-120 H.E.)

After the near disaster during the Expansion, the Terran Government used the resources of the new colonies to pay for the establishment of more colonies while the resources of Terra herself were spent to feed her masses. As time went on, another commerce net was established and Terra spent less and less on the colonies. Instead the resources of the Colony worlds were stripped to keep the population of Terra content. The people of the Colony Worlds protested in vain and finally formed a conspiracy. They hid supplies and equipment while infiltrating their own men into the merchant fleet. Finally they declared themselves the Independent Confederation of Planets (ICP) and refused to send more goods to Terra until their status was recognized and equal value was returned. Terra's reaction was immediate: they outfitted the few cargo ships that had remained loyal as transports and launched an invasion at the ICP's industrial world. The planet was quickly subjugated, but the rebellion was not over. The ICP had built two Escort class warships. In retaliation, the ICP sent these ships to bombard Terra. The resulting bombardment devastated Terra, causing a total economic collapse. With Terra eliminated from the picture, the Terran Navy was deprived of its only base and surrendered. It has been theorized that if the Terran Government had been prepared for the attack, they could have protected the planet and destroyed the ICP by destroying its cargo ships. Other historians have indicated that both sides held enough power to destroy each other, and the human race was lucky to have survived.

Player 1: ICP   Tech Level-2

Player 2: Terra   Tech Level-1

Game Length: Ten turns or until one side achieves victory.

Victory Conditions:

Player 1: Bring all planets of the Terran block into a status other than active.

Player 2: Bring all planets of the ICP into a status other than active.

Draw: Neither player achieves its victory conditions.

Destruction of human race: Both players achieve their victory conditions.

17.3 First Contact (208-248)

As it happened, the Colonial Wars turned out to be a blessing. Terra was rebuilt by the ICP and became a member. Its population was stabilized at a point where it was self-sufficient. Again Terra became the leader of the human race as the most intelligent and skilled people in the ICP were sent there for learning and training. The human race underwent a new renaissance, and long-range scouts searched adjacent sectors for new worlds to colonize. More commerce nets were formed and joined the ICP, and it looked like we would grow forever . . . until a long range scout in B sector discovered an inhabited planet. It had a warship circling it. The scout ship escaped under fire and the ICP started to build a war fleet in case the aliens should be hostile. The aliens were. Within four years the ICP was fighting for its life against a province of a huge Empire that had already defeated twelve other spacefaring races. After forty years, the Empire, diverted by internal conflict, gave up its attack, and the ICP began rebuilding its ruined worlds.

Player 1: ICP   Tech Level – 4

Player 2: Empire Tech Level – 2

Game Length: 10 turns

Victory Conditions:

Player 1: Avoid Player 2's victory conditions.

Player 2: Marginal – capture Terra

Decisive – bring economic collapse to the entire ICP.

17.4 Rebellion (293-347 H.E.)

Within an amazingly short time, the ICP had rebuilt its planets and had even expanded. During this period it kept the Empire off its back by supplying the Rebels in the nearby sectors with ships and supplies. Unwittingly they betrayed themselves, for the Empire was able to learn the ICP's technology from captured Rebel ships. Within twenty years the rebellion had been put down. Time passed and the Empire regained its strength. Border clashes between ICP and Empire ships became frequent. The ICP bided its time, building commerce nets in new sectors. Finally the ICP was rewarded. A major war on the other side of the Empire caused the removal of the Empire's

Reserve Fleets. ICP agents were sent into the Empire to foment rebellion. They promised independence and aid from the ICP. Several planets rose up in rebellion against the Empire. This time the ICP sent its own fleet to grab the frontier sector while the Empire was filled with internal strife. It is to be noted that mankind made its worst mistake ever in not granting independence to the planets they had 'liberated'. The subject races would never forget.

Player 1: ICP   Tech Level – 4

Player 2: Empire Tech Level – 4

Game Length: 14 turns

Victory Conditions:
> Player 1: Marginal Victory – 1 Net established in Sector B.
> > Decisive Victory – 2 Nets established in Sector B.
> Draw: any other result.
> Player 2: attain complete control of sector B.

17.5 The Final Conflict (403-present)

The War of the Rebellion ended in 347 H.E. with the Treaty of Division. Under this treaty the ICP claimed sectors A, B, D, E, F, N, O, and P. The Empire received sectors C, H, I, J, K, L, and M. A neutral zone for trade was established in sector G, where no colonies would be allowed. For almost sixty years there was peace. The Empire made its position solid with a long propaganda campaign pointing out the broken promises and treachery of the humans to the subject races. The ICP continued spreading in the sectors away from the Empire. When the Empire had built a large reserve of ships and supplies, it treacherously attacked us. The battle has been going on for eighty years. God knows when it will end.

> Jamis Wing
> LCDR MI ICPN
> VI Fleet Historical Officer
> Mar 23, 486 H.E.

Player 1: ICP   Tech Level – 5

Player 2: Empire Tech Level – 5

Game Length: Until one player achieves total victory or both declare peace.

Victory Conditions: The player with the most sectors wins.

18.0 SAMPLE TURN

This section is an example of the first turn in the scenario TERRAN EXPANSION.

First boot up your game disk. The starting display (3.0) should be on the screen. The highlighted areas should be set to NEW GAME, and the scenario should be set to TERRAN EXPANSION. If these are correct, then hit the space bar to start the game.

18.1 Production Phase Example

The computer will now print the message 'PLAYER1, IT IS YOUR MOVE. PRESS ANY KEY TO CONTINUE.' Now press a key. The computer will now display 'PRODUCTION PHASE. TURN1 PRESS ANY KEY TO CONTINUE.'. After that the computer will display the map (8.1) and print at the bottom of the screen 'WHAT SECTOR (A-P, X TO EXIT)?'. You are going to do the production orders for sector A by typing in 'A' and pressing the return key. The computer will now ask '(G)ENERAL DISPLAY, (S)HIP DISPLAY, (P)LANET DISPLAY, (O)RDERS, OR E(X)IT?'. Now type 'O' and press return. At this point the computer will print the general display (8.2) on the screen. The only nonzero items on the screen should be your 'INDUSTRIAL OUTPUT' points of 1750 and one active terran planet. Now you must decide how to spend your IO points. There are two things in this scenario that you should do with your IO points: use them as supply for ships and colonies or build ships. On the first turn it is a good idea to buy a couple of DEs to scout out new planets, but in later turns save most of your IO points for supplying colonies. At this point the computer will be asking you '(S)CUTTLE A SHIP, (B)UY SUPPLIES, OR E(X)IT?'. There is no need to scuttle a ship because you do not have any. Nor do you need to buy supplies, therefore type 'X' and press return. The computer will now display 'BUY A (S)HIP, (R)ESEARCH, OR E(X)IT?'. You should now buy two DEs to scout with so type 'S' and press return. The computer will ask 'WHAT SHIP CLASS?' so type in 'DE' and press return. The computer will now ask how many you want. Since a DE costs 650 IO points, you can buy a maximum of two of them. Buy two DEs and exit out of sector A and then exit the production phase.

18.2 First Movement Example

You will now be in the first movement phase. The map display should be on the screen. Now enter the order section for sector A. The computer will now ask 'MISSION (CM, SU, PA, IN, CR, SC, X)?'. To send ships on a scouting mission type 'SC' and press return. The computer will then ask what sector you wish to perform your mission in. Type in 'A' to scout in sector A. The ship display (8.3) will now be on the screen. It will show two DEs under 'GAR' on the display. At the bottom of the screen the computer will ask 'WHAT SHIP CLASS?'; type in DE and press return. The computer will then ask how many ships you want to go on the mission. Send both of your DEs on the scout mission. After doing that the two DEs should be under the column 'SCT'. You are now finished with this phase so exit out.

18.3 Colony Supply Example

Once the execution is complete you will be in the colony supply phase. The map display should be on the screen. Enter the order section for sector A. After doing that the planet display (8.4) will be on the screen. There should be a total of two discovered planets; these were found by your two scout ships during the execution phase. If you had supply you could colonize these planets. As you do not have any supply points exit out of the colony supply phase. It should be noted that it is not a good idea to colonize every planet as you find it. If you do this you will soon run out of supply. Next comes the second movement phase, which can only be used by ships that have a range of two. Since a DE only has one range factor exit out of this phase. The production phase for turn two follows after the second movement phase. The phase sequence for turn two will be the same as that of turn one.

19.0 PLAYER NOTES

The key to this game lies in your ability to produce ships and to deny the enemy the same ability. There are two ways to reduce the enemy's production: through the use of commerce raids and by eliminating nets.

Eliminating cargo ships works well, but only if the enemy uses just enough cargo ships to ensure full production. For instance, suppose you are attacking an enemy sector which contains three nets. The enemy needs 54 resource points moved to maintain the net *(NOTE: This is all the computer tells him during the first movement phase)* and an additional 24 resource points to get maximum production. This totals 78 resource points needed (3 x 18 + 3 x 8). Let us assume he puts 6 Freighters (66 cargo) and 2 Merchants (14 cargo) so that he is carrying 80 resource points. Let us assume you run 6 combat groups against him, destroying 12 cargo/resources. On his next turn, his resources for production would then be 14 (80 - 12 - 54), which gives him 3500 IOs. If the enemy had put even one extra freighter on commerce, the enemy would have had 25 (91 - 12 -54) resources available for production, of which he can only use 24 anyway! The raids would have had no real effect. Remember, however, that the damage could have been greater or less than the damage given in the example. It should also be noted that commerce raids are generally safer for the attacking ships than are the other missions.

Eliminating nets can be done in two ways: by planetary bombardment and by invasion. Since invasions are likely to run into reinforced garrisons, they should be composed of the best ships you have. Invasions are the best method of destroying nets available although they will lead to generally higher casualties. To defend against invasions, you should try to keep six *good* range one or range two warships on garrison.

Planetary raids are also effective but, like commerce raids, have some drawbacks. First of all, it usually takes at *least* two good size 4 ships to bomb successfully. If the mission runs into any garrison, it will need significantly more ships. Secondly, the enemy can counteract your damage by having run a supply mission within the sector. Then unless the planet was bombed more than once, the enemy will simply supply the bombed planet, enabling it to rejoin the net and continue production. As you can see, a combination of both commerce raids (aimed at destroying SU missions) and planetary raids (to wreck the net) is desired. In the face of an invasion, there is only only one real defense aside from having some good ships on garrison. If there are any planets in the sector which were not used in forming a net, it is advisable to maintain a few at active status. This will provide replacement planets in case some are captured.

The last thing to mention when talking about assigning ships' missions are your destroyers. You will find that destroyers will be the most frequently bought ships, since they are the most frequently destroyed ship. Every destroyer you can spare should be placed on patrol. A force of 40 or more destroyers on patrol will stop anything the enemy can throw...for one turn. Assuming the enemy went all out in his attack, you could lose up to 20 destroyers. This becomes expensive, but it is by

far your best defense (if you can afford the cost).

Furthermore, when moving your ships into a sector, be sure that you control planets within that sector and that your ship supply cost is not going to exceed the supplies available; that's a quick way to lose your fleet.

As a last note, a hint for the Terran expansion scenario: Don't colonize your planets until absolutely necessary. Maintaining farming planets at active status while still bringing up your mining planets is an extreme waste of supplies.

CREDITS

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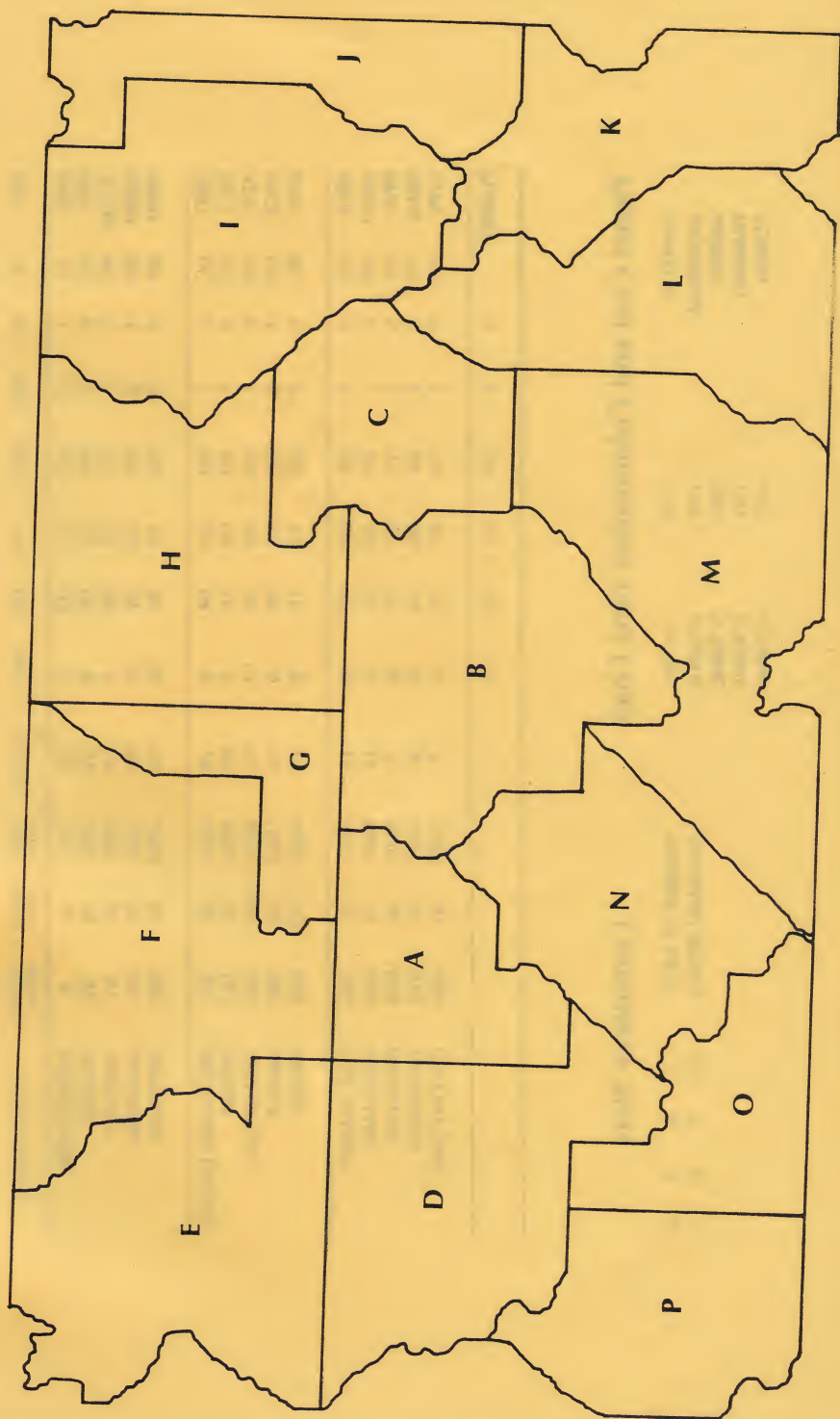Louis Hsu Saekow, Don Woo, and Kathy Lee

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Roland Gustafsson

Ship Characteristics, Cost, & Maintenance Table

SHIP	ID	SIZ	RAN	CARG	ATK	DEF	ARM %	MAX SPD	BUILD COST	MAINT COST	SCUTTLE BONUS	FULL SHIP NAME
INTR	IN	1	0	00	01	03	0	32	50	5	6	INTERCEPTOR
FRIG	FG	2	0	00	03	02	0	32	300	15	37	FRIGATE
WTCH	WT	3	0	00	05	08	8	24	650	30	81	WATCHER
GRDN	GD	4	0	00	10	22	11	24	1500	50	187	GUARDIAN
DFND	DF	5	0	00	14	26	20	24	4000	90	500	DEFENDER
DEST	DE	3	1	00	04	04	8	16	650	30	81	DESTROYER ESCORT
ESCT	ES	4	1	00	08	12	8	20	1500	45	187	ESCORT
ATTK	AT	5	1	00	12	28	17	24	4000	100	500	ATTACK SHIP
LNCR	LN	4	2	00	07	09	6	16	1500	50	187	LANCER
RAID	RD	5	2	00	12	19	8	24	4000	110	500	RAIDER
TRDR	TD	4	1	05	01	12	0	12	800	35	100	FREE TRADER
MRCH	MR	5	1	07	02	15	6	16	1600	55	200	MERCHANT
FRTR	FR	5	1	11	01	25	0	2	1600	40	200	FREIGHTER
TRAN	TR	5	2	04	08	34	6	8	3000	90	375	TRANSPORT
CLYS	CS	5	2	10	01	25	0	2	1600	50	200	COLONY SHIP
PLANET		5	0	00	00	30	50					

Planet Cost and Colonization Time Chart

PLANET TYPE	COST	COL TIME
INDUSTRIAL	700	8 TURNS
MINING	200	5 TURNS
FARMING	100	2 TURNS
TERRAN	450	4 TURNS

Commerce Nets

NUMBER OF NETS	1	2	3	4
MAXIMUM RESRCS	10	9	8	7